



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,271	03/12/2004	Kyung-geun Lee	1293.1740	5858
49455	7590	01/02/2008	EXAMINER	
STEIN, MCEWEN & BUI, LLP			DANG, HUNG Q	
1400 EYE STREET, NW			ART UNIT	PAPER NUMBER
SUITE 300				
WASHINGTON, DC 20005			2621	
		MAIL DATE	DELIVERY MODE	
		01/02/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/798,271	LEE ET AL.	
	Examiner Hung Q. Dang	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 November 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 March 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :05/03/2004, 10/15/2004, 05/31/2006, 11/03/2006, 01/31/2007.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 11/23/2007 have been fully considered but they are not persuasive.

The amended features in claims 1-11 do not overcome rejections under 35 U.S.C. 101 for two reasons: (1) it does not recite the information storage medium to be computer-readable; and (2) it contains only data (version information and revision information). Data, contrary to a set of computer-executable instructions, do not impart functionality to a computer or computing device.

At page 7-8, Applicant argues that Maeda does not disclose the revision information recited in claim 1. In response, the Examiner respectfully disagrees. The cited paragraphs in Maeda disclose various pieces of information that can be interpreted as either version information or revision information depending on various situations. For example, the "version number" in column 9, lines 27-30 could be "version information" recited in claim 1. In that case, the "revision number" recited in claim 1 could correspond to the information used to note the minimum lead-out rate cited in Maeda, column 9, lines 35-39. Obviously, discs having the same "version number" with different minimum lead-out rates should have different values recorded to note these changes correspondingly. Consequently, it is safe to say that this information indicates an update to the "at least one factor", which can be represented by the "version number". This information is recorded to note a specific value of minimum rate that could be changed, thus reflecting an update because whenever the information is

changed, it is recorded. As another example, we can take the “book type” information in column 9, lines 14-26 as version information which indicates the factor of “type of disc”. In this case, the “version number” in Maeda (column 9, lines 27-30) could be interpreted as the revision information, which signifies a part number. Whenever this information is changed, it is recorded. Thus, it indicates an update to the factor of “type disc” described above. Furthermore, one of ordinary skill in the art would recognize that these pieces of information are used to record and/or reproduce data because through them a specific standard or protocol is selected to perform a recording and reproduction to or from the medium. For example, a DVD disc must use DVD standards, the minimum rate should be used to set the apparatus to correct mode etc. as described in column 9, lines 59-67.

At page 8, Applicant argues that the Examiner has mischaracterized the claim 4. In response, the Examiner respectfully submits that it was mistyped unintentionally. The Examiner did cite the correct recitation to reject the revision information as recited in the claim. One of ordinary skill in the art would recognize that various pieces of information in the cited paragraphs are revision information as described above regarding claim 1.

In conclusion, the amended features do not overcome the prior art. Consequently, the rejections stand as previously presented.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. Sec. 101. Certain types of descriptive material , such as music, literature, art, photographs, and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture or composition of matter. USPTO personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. Sec. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, causes another defined series of notes to be played, defines a functional interrelationship among that data and the computing processes performed when utilizing that data, and as such is statutory because it implements a statutory process.

Claims 1-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 1-11 recite, "an information storage medium for use with a recording and/or reproducing apparatus" which does not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive material. Such nonfunctional descriptive material, in the absence of a functional interrelationship with a computer, does not constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-8, 10-16, 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Maeda et al. (US Patent 6,072,759).

Regarding claim 1, Maeda et al. disclose an information storage medium for use with a recording and/or reproducing apparatus, the information storage medium (column 5, lines 21-30) comprising: a recordable area to record data information (Figs. 5; column 5, lines 31); and a reproduction-only area to store a standard version information indicating at least one factor associated with data recording and/or reproduction prescribed by a manufacturer, and a revision information different from the standard version information indicating an update to the at least one factor and also prescribed by the manufacturer (column 8, line 34 – column 9, line 67; also see "Response to Arguments" above); wherein the standard version information and the revision information are used by the recording and/or reproducing apparatus to record and/or reproduce data to and/or from the information storage medium (column 8, line 34 – column 9, line 67; also see "Response to Arguments" above).

Regarding claim 2, Maeda et al. also disclose a lead-in area (column 8, line 34 – column 9, line 67; Fig. 5A; Fig. 5B; Fig. 5C); a user data area (Fig. 5A; Fig. 5B; Fig. 5C); and a lead-out area (Fig. 5A; Fig. 5B; Fig. 5C), wherein the reproduction-only area is included in at least one of the lead-in and lead-out areas, and the recordable area is recorded in a remaining portion of the lead-in area, the user data area, and the lead-out

area (column 8, line 34 – column 9, line 67; column 10, lines 3-10; column 18, lines 49-53; column 6, lines 3-6, 32-38).

Regarding claim 3, Maeda et al. also disclose the reproduction-only area is a disk control data zone included in at least one of the lead-in and lead-out areas (column 8, line 34 – column 9, line 67).

Regarding claim 4, Maeda et al. also disclose the revision information is recorded in an m-th byte of the disk control data zone (column 8, line 34 – column 9, line 67).

Regarding claim 5, Maeda et al. also disclose each time the revision information is changed, the changed revision information is recorded in the m-th byte (column 9, lines 35-39).

Regarding claim 7, Maeda et al. also disclose when the revision information is x.y, x is recorded in a first four bits of the m-th byte., and y is recorded in a last four bits of the m-th byte (column 9, lines 22-31).

Regarding claim 8, Maeda et al. also disclose one of a hexadecimal system and a binary system is used to record the revision information (column 9, lines 22-39).

Regarding claim 10, Maeda et al. also disclose when content of at least one of the factor changes, the revision information corresponding to the changed factor is recorded (column 9, lines 35-39).

Regarding claim 11, Maeda et al. also disclose the at least one factor is one of a recording speed, a mass eccentricity, and a recording capacity (column 9, lines 35-39).

Regarding claim 12, Maeda et al. disclose a method of recording and/or reproducing data in an information storage medium (column 2, lines 50-54) which

includes a lead-in area (column 8, line 34 – column 9, line 67; Fig. 5A; Fig. 5B; Fig. 5C), a user data area (Fig. 5A; Fig. 5B; Fig. 5C), and a lead-out area (Fig. 5A; Fig. 5B; Fig. 5C), the method comprising: recording a standard version information indicating at least one factor associated with data recording and/or reproduction prescribed by a manufacturer in a reproduction-only area of at least one of the lead-in and lead-out areas (column 8, line 34 – column 9, line 67; Fig. 5A; Fig. 5B; Fig. 5C); recording revision information indicating an update to the at least one factor and also prescribed by the manufacturer in the reproduction-only area (column 9, lines 35-39; also see “Response to Arguments” above); and reading the standard version information and the revision information and recording and/or reproducing data according to a standard associated with the standard version information and the revision information (column 2, lines 50 – column 3, line 7; column 8, line 34 – column 9, line 67).

Regarding claim 13, Maeda et al. also disclose a drive performs the reading (Fig. 22; Fig. 23A; Fig. 37A).

Claim 14 is rejected for the same reason as discussed in claim 3 above.

Claim 15 is rejected for the same reason as discussed in claim 4 above.

Claim 16 is rejected for the same reason as discussed in claim 5 above.

Claim 18 is rejected for the same reason as discussed in claim 7 above.

Regarding claim 20, Maeda et al. disclose a drive system (Fig. 22; Fig. 23A; Fig. 37A) for recording and/or reproducing data on an information storage medium (column 2, lines 50-54) comprising a reproduction-only area to record a standard version information indicating at least one factor associated with data recording and/or

reproduction prescribed by a manufacturer and a revision information different from the standard version information indicating an update to the at least one factor and also prescribed by the manufacturer (column 8, line 34 – column 9, line 67; Fig. 5A; Fig. 5B; Fig. 5C; also see “Response to Arguments” above), comprising: a pickup which records and/or reproduces the data from the information storage medium (Fig. 22; Fig. 23A; Fig. 37A; column 19, lines 47-55), wherein, when the information storage medium is inserted into the drive system (column 19, lines 39-45), the drive system reads out the version information and the revision information and records and/or reproduces the data according to a standard corresponding to the version information and the revision information (column 2, line 50 – column 3, line 7; column 8, line 34 – column 9, line 67; column 20, lines 56-60; column 22, lines 7-40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. (US Patent 6,072,759) as applied to claims 1-5, 7-8, 10-16, 18 and 20 above, and further in view of Ohno et al. (US Patent 6,628,602).

Regarding claim 6, see the teachings of Maeda et al. as discussed in claim 2 above. However, Maeda et al. do not disclose the revision information is repeatedly recorded in the lead-out area.

Ohno et al. disclose the recording information recorded in the lead-in area is repeatedly recorded in the lead-out area (column 1, lines 58-64).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the repeating in the lead-out area of recording information recorded in the lead-in area disclosed by Ohno et al. into the information storage medium disclosed by Maeda et al. for backup reason. The incorporated feature would make the information accessible even when one of the lead-in and lead-out areas becomes unreadable.

Claim 17 is rejected for the same reason as discussed in claim 6 above.

Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. (US Patent 6,072,759) as applied to claims 1-5, 7-8, 10-16, 18 and 20 above, and further in view of Kondo (US Patent 6,600,716).

Regarding claim 9, see the teachings of Maeda et al. as discussed in claim 1 above. Further, Maeda et al. also disclose the revision information is recorded in one byte of the reproduction-only area (column 9, lines 27-39). However, Maeda et al. do not disclose the revision information is repeatedly recorded in at least two of the bytes in the reproduction-only area.

Kondo discloses the recording information recorded in the lead-in area is repeatedly recorded in the lead-in area (column 13, lines 50-54).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the repeating in the lead-in area of recording information recorded in the lead-in area disclosed by Kondo into the information storage medium

disclosed by Maeda et al. for backup reason. The incorporated feature would make the information accessible even when the lead-in area becomes unreadable.

Claim 19 is rejected for the same reason as discussed in claim 9 above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

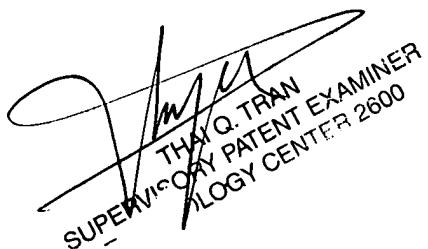
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is 571-270-1116. The examiner can normally be reached on M-Th:7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hung Dang
Patent Examiner



A handwritten signature in black ink, appearing to read "HUNG DANG". To the right of the signature, there is printed text:

THAI Q. TRAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600